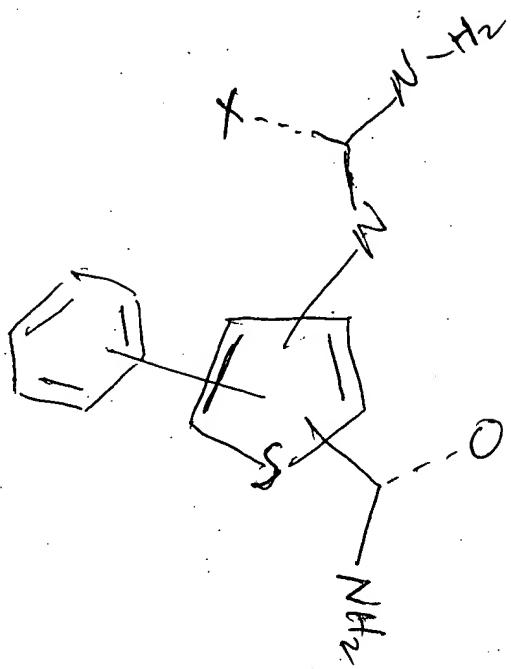


9/868,884

Query



$$X = O, S$$

See also attached claims 1 + 8

Applicant : Andrew Baxter et al.
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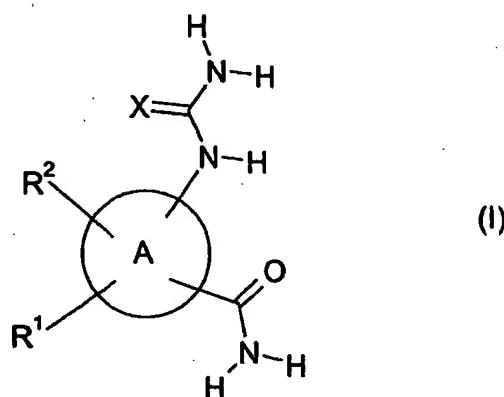
Attorney's Docket No.: 06275-233001 / Z70663-1P US

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Previously presented) A compound of formula (I)



A represents thiophene;

R¹ represents a phenyl group; said phenyl being optionally substituted by one or more substituents selected independently from halogen, cyano, nitro, -NR³R⁴, -CONR⁵R⁶, -COOR⁷, -NR⁸COR⁹, -SR¹⁰, -S(O)mR¹⁰, -S(O)₂NR⁵R⁶, -NR⁸SO₂R¹⁰, C₁-C₆ alkyl, trifluoromethyl, -(CH₂)nR¹¹, -O(CH₂)nR¹¹ or -OR¹²;

R² represents hydrogen, halogen, cyano, nitro, -NR¹³R¹⁴, -CONR¹⁵R¹⁶, -COOR¹⁷, -NR¹⁸COR¹⁹, -S(O)mR²⁰, -S(O)₂NR¹⁵R¹⁶, -NR¹⁸SO₂R²⁰, C₁-C₂ alkyl, trifluoromethyl, C₂-C₃ alkenyl, C₂-C₃ alkynyl, trifluoromethoxy, C₁-C₂ alkoxy or C₁-C₂ alkanoyl;

X represents oxygen or sulfur;

each of R³, R⁴, R⁵, R⁶, R⁷, R⁸, R⁹, R¹⁰ and R¹² independently represent a hydrogen atom or C₁-C₆ alkyl;

R^{11} represents $NR^{21}R^{22}$ where R^{21} and R^{22} are independently hydrogen or C_1-C_6 alkyl optionally substituted by C_1-C_4 alkoxy; or R^{21} and R^{22} together with the nitrogen atom to which they are attached form a 5- or 6-membered saturated ring optionally containing a further O, S or NR^{23} group where R^{23} is hydrogen or C_1-C_6 alkyl; or R^{11} represents OR^{24} where R^{24} represents C_1-C_6 alkyl;

each of R^{13} , R^{14} , R^{15} , R^{16} , R^{17} , R^{18} , R^{19} and R^{20} independently represent a hydrogen atom or C_1-C_2 alkyl;

m represents an integer 0, 1 or 2;

n represents an integer 2, 3 or 4;

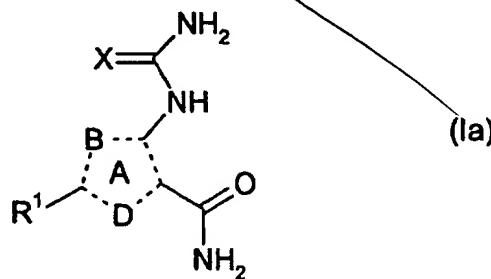
and optical isomers, racemates, and tautomers thereof and pharmaceutically acceptable salts or solvates thereof:

provided that:

when A represents thiophene, then R^1 is not 4-pyridinyl or 3-pyrazolyl.

2. (Original) A compound of formula (I), according to Claim 1, wherein X represents oxygen.

3. (Previously presented) A compound of formula (I), according to Claim 1, in which the group A is substituted as shown below in formula (Ia), where B and D are selected from CR^2 and S, where R^2 is as defined in Claim 1 and R^{25} is hydrogen or C_1-C_6 alkyl:



4. (Cancelled)

5. (Cancelled)

6. (Previously presented) A compound according to claim 1 in which R² represents H or methyl.

7. (Original) A compound according to Claim 6 in which R² represents H.

8. (Original) A compound of formula (I), according to claim 1, selected from:

3-[(aminocarbonyl)amino]-5-phenyl-2-thiophenecarboxamide;

3-[(aminocarbonyl)amino]-5-(3-chlorophenyl)-2-thiophenecarboxamide;

3-[(aminocarbonyl)amino]-5-(4-fluorophenyl)-2-thiophenecarboxamide;

3-[(aminocarbonyl)amino]-5-(4-chlorophenyl)-2-thiophenecarboxamide;

3-[(aminocarbonyl)amino]-5-(4-isobutylphenyl)-2-thiophenecarboxamide;

3-[(aminocarbonyl)amino]-5-(4-methoxyphenyl)-2-thiophenecarboxamide;

3-[(aminocarbonyl)amino]-5-(3-hydroxyphenyl)-2-thiophenecarboxamide;

3-[(aminocarbonyl)amino]-5-(2-chlorophenyl)-2-thiophenecarboxamide;

3-[(aminocarbonyl)amino]-5-(2-methoxyphenyl)-2-thiophenecarboxamide;

3-[(aminocarbonyl)amino]-5-{2-[2-(dimethylamino)ethoxy]phenyl}-2-thiophenecarboxamide;

3-[(aminocarbonyl)amino]-5-{4-[2-(dimethylamino)ethoxy]phenyl}-2-thiophenecarboxamide;

3-[(aminocarbonyl)amino]-5-(3-methoxyphenyl)-2-thiophenecarboxamide;

2-[(aminocarbonyl)amino]-5-phenyl-3-thiophenecarboxamide;

3-[(aminocarbonyl)amino]-5-{4-[2-(1-morpholinyl)ethoxy]phenyl}-2-thiophenecarboxamide;

3-[(aminocarbonyl)amino]-5-{4-[2-(1-pyrrolidinyl)ethoxy]phenyl}-2-thiophenecarboxamide;

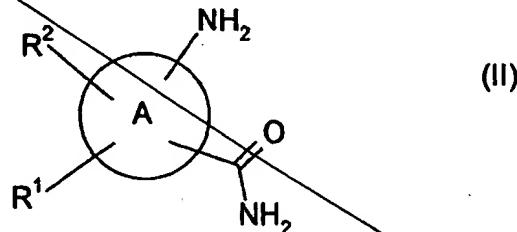
3-[(aminocarbonyl)amino]-5-{4-[2-(1-piperidinyl)ethoxy]phenyl}-2-thiophenecarboxamide;
3-[(aminocarbonyl)amino]-5-{4-[3-(dimethylamino)propoxy]phenyl}-2-thiophenecarboxamide;
3-[(aminocarbonyl)amino]-5-{3-[2-(dimethylamino)ethoxy]phenyl}-2-thiophenecarboxamide;
3-[(aminocarbonyl)amino]-5-{3-[2-(1-morpholiny)ethoxy]phenyl}-2-thiophenecarboxamide;
3-[(aminocarbonyl)amino]-5-{3-[2-(1-pyrrolidinyl)ethoxy]phenyl}-2-thiophenecarboxamide;
3-[(aminocarbonyl)amino]-5-{3-[2-(1-piperidinyl)ethoxy]phenyl}-2-thiophenecarboxamide;
3-[(aminocarbonyl)amino]-5-{3-[3-(dimethylamino)propoxy]phenyl}-2-thiophenecarboxamide;
3-[(aminocarbonyl)amino]-5-{2-[2-(1-morpholiny)ethoxy]phenyl}-2-thiophenecarboxamide;
3-[(aminocarbonyl)amino]-5-{2-[2-(1-pyrrolidinyl)ethoxy]phenyl}-2-thiophenecarboxamide;
3-[(aminocarbonyl)amino]-5-{2-[2-(1-piperidinyl)ethoxy]phenyl}-2-thiophenecarboxamide;
3-[(aminocarbonyl)amino]-5-{2-[3-(dimethylamino)propoxy]phenyl}-2-thiophenecarboxamide;
2-[(aminocarbonyl)amino]-4-methyl-5-(4-chlorophenyl)-3-thiophenecarboxamide;
2-[(aminocarbonyl)amino]-4-methyl-5-(4-methylphenyl)-3-thiophenecarboxamide;
2-[(aminocarbonyl)amino]-4-ethyl-5-phenyl-3-thiophenecarboxamide;
2-[(aminocarbonyl)amino]-4-methyl-5-(4-methoxyphenyl)-3-thiophenecarboxamide;
2-[(aminocarbonyl)amino]-4-methyl-5-(4-fluorophenyl)-3-thiophenecarboxamide;
2-[(aminocarbonyl)amino]-4-methyl-5-(3-fluorophenyl)-3-thiophenecarboxamide;
2-[(aminocarbonyl)amino]-4-methyl-5-(3-methoxyphenyl)-3-thiophenecarboxamide;
2-[(aminocarbonyl)amino]-4-methyl-5-(3-chloro-4-methoxyphenyl)-3-thiophenecarboxamide;
2-[(aminocarbonyl)amino]-4-methyl-5-(2-chlorophenyl)-3-thiophenecarboxamide;
2-[(aminocarbonyl)amino]-4-methyl-5-(3-trifluoromethylphenyl)-3-thiophenecarboxamide;

2-[(aminocarbonyl)amino]-4-methyl-5-(3-methyl-4-methoxyphenyl)-3-thiophenecarboxamide;
2-[(aminocarbonyl)amino]-4-methyl-5-(3,5-dimethoxyphenyl)-3-thiophenecarboxamide;
2-[(aminocarbonyl)amino]-4-methyl-5-(2,3-dimethoxyphenyl)-3-thiophenecarboxamide;
2-[(aminocarbonyl)amino]-4-methyl-5-(4-isopropylphenyl)-3-thiophenecarboxamide;
2-[(aminocarbonyl)amino]-4-methyl-5-(3,4,5-trimethoxyphenyl)-3-thiophenecarboxamide;
2-[(aminocarbonyl)amino]-4-methyl-5-(3,4-dichlorophenyl)-3-thiophenecarboxamide;
2-[(aminocarbonyl)amino]-4-methyl-5-(4-cyanophenyl)-3-thiophenecarboxamide;
2-[(aminocarbonyl)amino]-4-methyl-5-(4-hydroxyphenyl)-3-thiophenecarboxamide;
2-[(aminocarbonyl)amino]-4-methyl-5-(4-[2-(1-piperidinyl)ethoxy]phenyl)-3-thiophenecarboxamide;
2-[(aminocarbonyl)amino]-4-methyl-5-(4-[2-(diethylamino)ethoxy]phenyl)-3-thiophenecarboxamide;
2-[(aminocarbonyl)amino]-4-trifluoromethyl-5-phenyl-3-thiophenecarboxamide;
2-[(aminocarbonyl)amino]-4-methyl-5-phenyl-3-thiophenecarboxamide;
2-[(aminocarbonyl)amino]-5-(4-cyanophenyl)-3-thiophenecarboxamide;
2-[(aminocarbonyl)amino]-5-(4-trifluoromethylphenyl)-3-thiophenecarboxamide;
2-[(aminocarbonyl)amino]-5-(2,4-difluorophenyl)-3-thiophenecarboxamide;
2-[(aminocarbonyl)amino]-5-(4-hydroxyphenyl)-3-thiophenecarboxamide;
2-[(aminocarbonyl)amino]-5-(4-chlorophenyl)-3-thiophenecarboxamide;
2-[(aminocarbonyl)amino]-5-(4-methanesulphonylphenyl)-3-thiophenecarboxamide;
2-[(aminocarbonyl)amino]-5-(4-[2-(1-piperidinyl)ethoxy]phenyl)-3-thiophenecarboxamide;

2-[(aminocarbonyl)amino]-5-(4-[2-(1-(2,2,6,6-tetramethyl)piperidinyl)ethoxy]phenyl)-3-thiophenecarboxamide;
2-[(aminocarbonyl)amino]-5-(4-(thiazol-4-yl-methoxy)phenyl)-3-thiophenecarboxamide;
2-[(aminocarbonyl)amino]-5-(4-[2-(dimethylamino)ethoxy]phenyl)-3-thiophenecarboxamide;
2-[(aminocarbonyl)amino]-5-(4-[2-(diethylamino)ethoxy]phenyl)-3-thiophenecarboxamide;
2-[(aminocarbonyl)amino]-5-(4-[2-(1-morpholinyl)ethoxy]phenyl)-3-thiophenecarboxamide;
2-[(aminothiocarbonyl)amino]-5-phenyl-3-thiophenecarboxamide;
and pharmaceutically acceptable salts and solvates thereof.

9. (Currently amended) A process for the preparation of a first compound of formula (I), according to claim 1, which comprises:

(a) reaction of a compound of formula (II):



wherein A, R¹ and R² are as defined in Claim 1, with an isocyanate (X = O) or an isothiocyanate (X = S), to produce the first compound of formula (I); or

(b) reaction of compound of formula (III) with a compound of formula (IV)